

Patent Claims

1. Method and apparatus for operating a motor vehicle having a driving engine and an automated or automatic transmission in the drive train for transmitting a torque, a transmission control unit that is equipped with a memory function, particularly to improve riding comfort during a shift of gears from R to D that is connected with an engagement/disengagement process, characterized in that a momentary engagement of the engine torque occurs before a shift of gears takes place by means of the transmission actuator.

2. Method and apparatus in accordance with claim 1, characterized in that a driver-identifying lock recognition system is provided.

3. Method in accordance with claim 1, characterized in that the engine torque is changed by means of the transmission control system that is regulated by the CAN bus.

4. Method in accordance with claims 1 and 3, characterized in that the engine torque is less than 10 Nm before the gear shift.

5. Method in accordance with claim 1, characterized in that the memory function of the transmission control unit (13) or of the driver-identifying lock system is utilized to balance relevant adaptation parameters in the corresponding control units (13, 13c and 13d).

6. Method in accordance with claims 1 and 5, characterized in that in the communication with the transmission control unit (13) an additional signal is established that identifies the corresponding driver (Driver-ID).

7. Method in accordance with claims 1, 5 and 6, characterized in that the adaptation parameters for the shift program of the transmission (4) are input following the boot process of the transmission control unit (13) and the driver identification.

8. Method in accordance with claims 1, 5 and 7, characterized in that the linking of the signals from the control units (13, 13c, and 13d) takes place through the CAN bus of the motor vehicle (1).

9. Method in accordance with claim 1, characterized in that the data from the actuators are detected in the control unit for the level control of the chassis and are correlated with the transmission control.

10. Method in accordance with claim 9, characterized in that a level control of the chassis takes place as a function of the engagement/disengagement and shift processes.

11. Apparatus in accordance with claims 1, 9 and 10, characterized in that the actuators (43) are arranged in at least the forward and/or rear axles of the motor

vehicle (1), and are either parallel to the respective shock absorber of the chassis or are a component of the shock absorber.

12. Apparatus in accordance with claim 11, characterized in that during the control process the regulating distances of the actuators (43) of an axle can be regulated equally or individually for each wheel.